

WHAT IS CLAIMED IS:

- Sub E1 1. An arrangement for providing telephonic communication which may be selectively transmitted via the Internet using standard Internet protocols, comprising:
- a telephone; and
 - an interface unit coupled to the telephone and configured and arranged to receive audio information of the telephonic communication, the interface unit including
 - a first output port configured to be coupled to a standard switched telephone communications network,
 - a second output port configured to be coupled to an Internet communications network, and
 - a processing unit configured and arranged to determine if the audio information received from the telephone is to be coupled to the first output port to establish a standard telephonic communication using the standard switched telephone communications network, or if the audio information is to be processed in accordance with the standard Internet transfer protocols and coupled to the second output port to ~~establish~~ ^{establish} an Internet communication using the Internet communications network to communicate the processed audio information in accordance with the standard Internet transfer protocols.

2. An arrangement as recited in claim 1, wherein the standard Internet transfer protocols include a standard gatekeeper protocol for handling gatekeeper signaling, a standard Internet call protocol for handling Internet call signaling and a standard end-to-end protocol for handling end-to-end control.

3. An arrangement as recited in claim 2, wherein the standard gatekeeper protocol uses an RAS standard protocol, the standard Internet call protocol uses a Q.931 standard protocol and the standard end-to-end protocol uses an H.245 standard control protocol.

4. An arrangement as recited in claim 1, wherein the standard Internet transfer protocols include a standard packetization protocol to packetize a stream of audio information.

5. An arrangement as recited in claim 4, wherein the standard packetization protocol uses a standard real-time transfer protocol (RTP).

6. An arrangement as recited in claim 3, wherein the standard Internet transfer protocols include a standard real-time transfer protocol (RTP) to packetize a stream of audio information.

7. An arrangement as recited in claim 4, wherein the standard Internet transfer protocols include a standard quality-of-service protocol for gathering quality-of-service

statistics of packetized information delivered to a receiving device.

8. An arrangement as recited in claim 5, wherein the standard Internet transfer protocols include a standard quality-of-service protocol for gathering quality-of service statistics regarding packetized information communicated over the Internet.

9. An arrangement as recited in claim 8, wherein the standard quality-of service protocol uses standard real-time transfer control protocol (RTCP).

10. An arrangement as recited in claim 7, further comprising a monitoring unit provided to monitor the quality-of-service statistics and to adaptively control a rate at which audio information is transferred over the Internet.

11. An arrangement as recited in claim 9, further comprising a monitoring unit provided to monitor the RTCP information and to adaptively control a rate at which audio information is transferred over the Internet.

Sub 12. A method of providing telephonic communication using an Internet communications channel, the method comprising the steps of:

providing a first communications device, coupled to a standard switched telephone network for normal telephonic communication and to an Internet connection

coupled to the Internet, the first communications device including an interface device provided to selectively couple an output of the first communications device to one of the standard switched telephone network and the Internet connection;

providing a second communication device coupled to the Internet;

initiating a call using the first communication device to the second communication device using by establishing an initial Q.931 protocol;

establishing far end control of the second communication device by the first communication device in accordance with an H.245 protocol;

performing gatekeeper signaling in the first communication device accordance with an RAS protocol; and

packetizing audio information of the telephonic communication for transfer over the Internet using a standard real-time transfer protocol (RTP).